

Remarks by the Honorable Ray Mabus
Secretary of the Navy
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Jim, thank you so much. If you read his bio, most of his relatives became flag officers in the United States Navy. And the only one I could really identify with was his father, who was a lieutenant junior grade on a minesweeper. I topped out at lieutenant junior grade when I was in the United States Navy decades ago.

I particularly want to welcome the ambassadors, the representatives of our partners, our allies that we work with day in and day out, and particularly on this issue.

As Jim said in his introduction, I get some questions from time to time, well, why the Navy? Why should the Navy be interested in fuels? Why should the Navy try to take a lead in this? Well, as he said, we've always been a leader. We went from sail to coal, coal to oil, and we pioneered the use of nuclear for transportation. And every single time we did that – every single time there were naysayers. There were people who said, no, you can't do this.

In the case of sail, when we left it to go to oil, they said: You're giving up something that's free, the wind, for something that costs money, coal. When we went from coal to oil, we had all these coaling stations set up around the world. How can you abandon that infrastructure? And then when we pioneered nuclear, legions of people said: You can never make nuclear small enough to put on a submarine or safe enough. Well, every single time – every single time they were wrong. And they're going to be wrong now about moving to alternative fuels.

When this country was founded, those that founded it recognized the importance of a great Navy. Our constitution gives Congress the authority to raise an Army when it is needed, but it mandates that you maintain a Navy. The Navy and Marine Corps, so vital to our nation's security, and what we uniquely give to this country and to the world is presence, the ability to be in the right place at the right time. I call the Navy and Marine Corps America's away team because we deploy as much in times of peace as we do in times of war. There are no permanent homecomings for Sailors and Marines.

And it's not only vital for our national security. It's vital for our economic well-being. Freedom of the seas, freedom of navigation aren't just important, they're imperative to our global economy. Ninety percent of all trade moves by water. Ninety-five percent of all data and telecommunications go under the sea. Our economic success is absolutely tied to the sea. And it's the United States Navy, working with our partners, working with our allies, that keep those sea lanes open. We get places faster. We stay longer. We bring everything we need. And we don't have to ask anyone's permission to do what needs to be done.

Best example of that was when ISIS started across Iraq and the decision was made to strike them. We had a carrier, the Bush, in the Northern Arabian Sea. It got on station in the Arabian Gulf in less than 30 hours and began launching strikes. For 54 days – 54 days it was the only option that we had. And it wasn't because we didn't have other assets in the region, other airplanes. We did. It's just the countries in the region wouldn't give us permission to load those planes for strike missions. We don't have to ask. We're taking off from American soil.

There are four fundamentals that allow us to provide this presence – people, platforms, power and partnerships – because being where we need to be when we need to be there with everything we need to do depends on all four of those things. Now, obviously, today I'm going to talk about power, energy, but I'm also going to talk about partnerships, the work that we do together.

You know, I'm preaching to the choir now, but energy is an absolute necessity for modern life. We've all seen the geopolitical role that it plays. Access to fuel can and is being used as a weapon. You don't have to look any further than what Russia does to the Ukraine or to Europe in terms of using energy as a geostrategic weapon. Being overly reliant on outside sources of fuel, power, is an economic and security risk. And it's a risk I'm not willing to take for the Navy and the Marine Corps.

Our Department of Defense is the largest user of fossil fuels on Earth. And the Navy and Marine Corps is a little bit more than a third of that usage. When I was getting ready to take this job and getting briefed on the things the Navy and Marine Corps were doing, one thing became clear very quickly, and that was energy if a vulnerability – the access to energy, the ability to get it. And so only a few months after I took this office, I came up with some goals for the Navy and Marine Corps, and the biggest one of which is that by no later than 2020 at least half of all our energy afloat and ashore will come from non-fossil fuel sources.

Now, ashore we're going to meet that goal by the end of this year. We're going to be five years early. We're going to have a gigawatt, half of all our energy needs for bases, by the end of 2015 from alternative energy sources. We're a sea-going service, but we also own 3 ½ million acres of land, 117,000 buildings. So we are fairly large on shore too. At sea, we've certified every single one of our aircraft, every single one of our ships on biofuels.

Now, the only requirements we have for biofuels, but they are important – one is that it's got to be a drop-in fuel. We can't change our engines. We've got the fleet that we're going to have for quite a while and we've got the aircraft that we're going to have. So the engine can't notice a difference. Second, it can't take any land out of food production. Third, it's got to lower our carbon footprint. And fourth, it's got to be cost competitive.

Now, we're pretty neutral on feedstocks. And we've found a whole lot of feedstocks. And I know that people here represent a lot of different ways to get to the end result in biofuels. We've done municipal solid waste, used cooking oil, woody biomass, algae, camelina. And we've demonstrated the use of these biofuels, first at the Rim of the Pacific in 2012. That's the largest naval exercise in the world every two years, RIMPAC.

We demonstrated something we call the Great Green Fleet. The Great Green Fleet was a carrier strike group. The carrier was nuclear, but every type of aircraft that flew off that carrier was flying on a 50/50 blend of biofuels and aviation gasoline. And every ship was steaming on a 50/50 blend of marine diesel and biofuels.

And we bought these fuels, we put them in our normal logistics chain, got them to Hawaii where RIMPAC occurs, took it out on a now-misnamed ship, an oiler, to – we did refuelings at sea, we did air-to-air refuelings with it. And the only difference we noticed – the only thing that we got any feedback on was that the biofuels burned a little clearer, our engines didn't gunk up quite as much.

In 2011, the President directed Navy, agriculture and energy to come up with a nationwide cost-competitive biofuel industry – either construct it or retrofit it. And what we brought to the table was something called the Defense Production Act. DPA says that if you need something for national defense that you don't have at scale, we can make some investments in it. And that's what we've done.

But again, going back to those requirements, it's got to be cost competitive. And one of the things that we're trying to do with alternative fuels is to cut down on the volatility of our fuel prices. Oil goes way up. Oil goes way down. We're trying to smooth that out. And there are three companies right now that are receiving these investments in biofuels.

And we're going to continue to work with them, we're going to continue to work with everybody until alternative fuels – whether on land or at sea – is just a new normal, that it's not unusual. We're there on land. And we're making a lot of progress at sea. We're going to deploy the Great Green Fleet on a normal deployment – 6, 7, 8 months – next year – again, using biofuels, using nuclear, to make sure that we can meet whatever challenges.

Another reason that changing the mix of the type of fuels that we use and fuel efficiency – which is second side to the same coin – is so critical is we've got to be able to power the number of ships that we need. On 9/11/2001, the U.S. Navy had 316 ships. By 2008, that number had dropped to 278 ships. So after one of the great military buildups in our history, the Navy got significantly smaller.

In the five years before I became Secretary, the U.S. Navy put 27 ships under contract. That wasn't enough to stop that slide in the size of the fleet. The first five years I've been secretary, we have put 70 ships under contract, with a smaller top line. And by the end of this decade, we will have a fleet of more than 300 ships again. And one of the ways we did that was through competition. Competition is a powerful way to drive down prices.

And I think that particularly the liquid fuel market is one of those places we need competition. Sheikh Zaki Yamani, the former Saudi oil minister, very famously said: The Stone Age didn't end because we ran out of stones. It ended because we invented something better. I think the same thing is going to be true here. We need to end the monopoly that traditional fuels have had in the liquid fuel market.

The question is raised now about whether biofuels are still worth it – alternative energy source in general are still worth it as the price of oil and gas has gone down so dramatically. Now, onshore it's easy. We're still saving money doing things like solar and wind and geothermal and hydrothermal.

But at sea, the answer so far is also yes. We've begun seeking biofuels as part of our normal bulk fuel purchases. And we're going to keep buying cost competitive biofuels for our ships and our aircraft for operational purposes. And that's where y'all come in. That's where this industry comes in, in terms of being cost competitive, in terms of giving us alternatives, in terms of giving us the alternative fuel types that we need.

Now, we're doing lots of stuff in innovation and efficiency. We got one big deck amphib, the Makin Island; and another one that just got commissioned, the America; a third is being built, the Tripoli, that are hyper drives – electric drive for speeds under 12 knots, regular drive for speeds over 12 knots. First time we sent the Makin Island out, she came back with almost half of her fuel budget unspent.

We're retrofitting two of our destroyers next year. We're building an all-electric ship, the Zumwalt-class DDG-1000 that we think not only will have the energy to drive the ship and to power those weapons systems and the combat systems that we have now that are such energy hogs, but also to do so in a far, far more efficient way. So what those things are going to do in addition to the types of fuel we're using, it's going to allow us to stay on station longer, refuel less, because naval ships are the most vulnerable when they're refueling.

And finally, our Marines – and when most people think of Marines, they don't think of ardent environmentalists. But Marines have been leaders in alternative energy, just like they have in everything else, because at the height of the fighting in Afghanistan we were losing a Marine for every 50 convoys of fuel being brought in – a Marine killed or wounded. And that's too high a price to pay.

So what they do is they establish something called ExFOB, experimental forward operating base. And they twice a year – once in Quantico here, once in Yuma, Arizona – they invite industry in. What have you got? So now Marines have solar chargers that they put in their packs. They got knee braces that turn those legendary long hikes of the Marines into energy, so they power their GPS and their radios. And they save about 700 pounds of batteries per company and they don't have to be resupplied.

Both the Navy and the Marine Corps have a long and very successful history of partnering with industry to get what we need to defend this country, and to promote the sectors and the products that are important to that. And so these programs – diversifying fuel supplies, stabilizing fuel costs, reducing overall energy needs.

And I want to say a particular word about the ambassadors, other representatives here. As you read out that list, I've been to every single one of those countries as Secretary. In fact, I take off next week – I've now had three of my four budget hearings. Next Tuesday's the last one. I'll be the guy smiling really big next Tuesday afternoon. (Laughter.) But on Wednesday morning, we leave for Iwo Jima to mark the 70th anniversary of the Battle of Iwo Jima. I'll go over a million air miles on that trip, 132 different countries and territories.

Everywhere I go we talk about energy. We have the ambassador from Singapore here. Singapore has to import virtually all its energy. It's one of the leaders now in alternative energy. We have been working with allies and partners to diversify those sources of energy to reduce the risk, to reduce the ability of people to use energy as a weapon, and to make sure that we can maintain those open seas. Singapore's a great example. Straits of Malacca – almost 40 percent of all commerce in the world goes through the Straits of Malacca of Singapore. The Singaporean navy and the United States Navy have kept those sea lanes open for decades now.

It's our great challenge for the future to lead the way as our environmental and our energy needs change and the sea lanes remain every-more relevant, whether it's in the Arctic, where the northern passage is ice free more today than ever, or to our own shores. Jim mentioned rising sea levels. They threaten in an existential way some island nations. But they threaten us here as well. We're the Navy. Most of our bases are on the coast.

The Navy will be present. The Navy will have that presence. The Navy will continue to drive innovation and meet that uncertain future head-on with new ideas, with help from you, with the absolute certainty that the only thing that is constant is change. So thank you, again. Thank you so much for this. I hope it's OK that I put it down, that I didn't hold it the whole time. (Laughter.) It's one of the most impressive things I've ever gotten.

Thank you for what you do. Thank you for what you do for the economy of this country and thank you for what you do for the security of this country. So from the Marine Corps *semper fidelis*, always faithful, and from the Navy, *semper fortis*, always courageous. Thank you all very much.